

WHAT IS CLAIMED IS:

- 1 1. A method of transferring data comprising:
2 receiving a transfer request;
3 determining if the transfer request is a write to a memory location;
4 if the transfer request is a write to a memory location, then sending the transfer
5 request as a posted request; else
6 determining a number of available transfer request entries in a posted-write first-
7 in-first-out memory; and
8 if the number of transfer request entries available is greater than a first number;
9 then
10 sending the transfer request as a posted request; else
11 waiting to send the transfer request as a posted request.
- 1 2. The method of claim 1 wherein the transfer request is made by a video
2 capture card.
- 1 3. The method of claim 1 wherein the transfer request is made by a graphics
2 processor.
- 1 4. The method of claim 1 wherein the transfer request is sent over a
2 HyperTransport bus.
- 1 5. The method of claim 1 wherein the number of pending posted requests is
2 determined by an arbiter.
- 1 6. The method of claim 1 wherein the first number is programmable.
- 1 7. The method of claim 1 wherein the first number has a value of one.
- 1 8. A method of transferring data comprising:
2 maintaining a first number of tokens;
3 receiving a plurality of posted requests;
4 if a remaining number of the first number of tokens is less than a first number,
5 forwarding one of the plurality of posted requests as a non-posted request; else

6 not forwarding the one of the plurality of posted requests as a non-posted request.

1 9. The method of claim 8 wherein the first number of tokens is one.

1 10. The method of claim 8 wherein the first number of tokens is maintained
2 by an address decoder.

1 11. The method of claim 8 further comprising:
2 receiving a response from a pending non-posted request; and
3 incrementing the number of available tokens by one.

1 12. The method of claim 11 further comprising when the number of tokens is
2 incremented above the first number, then forwarding the one of the plurality of posted requests
3 as a non-posted request.

1 13. An integrated circuit comprising:
2 an arbiter configured to track a number of available entries in a posted request
3 FIFO;
4 a plurality of clients coupled to the arbiter; and
5 a HyperTransport bus coupled to the arbiter;
6 wherein the arbiter receives peer-to-peer requests from the plurality of clients and
7 provides posted requests to the posted request FIFO, and
8 when the number of available entries in the posted request FIFO is equal to a first
9 number, then preventing the plurality of clients from sending peer-to-peer requests.

1 14. The integrated circuit of claim 13 wherein the plurality of clients includes
2 a graphics processor.

1 15. The integrated circuit of claim 14 wherein the plurality of clients further
2 includes a PCI-to-PCI bridge.

1 16. The integrated circuit of claim 13 wherein the number of pending peer-to-
2 peer requests is incremented by one for each granted posted request.

1 17. The integrated circuit of claim 16 wherein the number of pending peer-to-
2 peer requests is decremented by one for each peer-to-peer request provided by a receive FIFO.

1 18. The integrated circuit of claim 13 further comprising when the number of
2 pending peer-to-peer requests is less than the first number, allowing the number of clients to
3 issue a peer-to-peer request.

1 19. The integrated circuit of claim 18 wherein the first number is one.